

NYKTOPSIS:

OR, THE

USE and ABUSE

L. W. K. OF 1080. L. A. 12

SNUFFERS.

Shewing, that tho' the Invention,
or Use of them was very antient, viz.
among the Jews, yet, for divers weighty
Reasons, they ought, at length, amongst
Christians, to be abolish'd and
lay'd aside. With an Attempt for introducing
a new invented MACHINE, of
far greater Use and Safety.

The Trepidation talk'd. Milton, lib. 3.

Dedicated to Dr. B. T.

L O N D O N:

Printed for A. MORE near St. Paul's.
M DCC XXVI.

W. K. T. O. P. 2. 1. 2.

OF THE
USE AND ABUSE

OF
SINNERS

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of the of them was very
among the Jews, yet
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and
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The Revision of the

Dedicated to Dr. B. T.

L O W D O N

Printed for A. Moore and S. P. 1. 1. 1.
M DCC LXXI

P R E F A C E.



TH E great Prestigiator* Cindercol, who first attempted that most amazing exploit, of cutting a man's head off, and setting it on again, could change himself into all shapes and forms, yet never assum'd any so frequently as that of a pair of Snuffers; because in this shape, he was not only secure against all outward force, *either of the Element's or man's device, viz. of Fire, Water, Earth, Air, Halsters, Daggers, or Poison:* But had so great a power himself, that he could render weak all the attempts of the Learned in the foregoing ages of the world against him.

His wonderful exploits are recorded in this small treatise, and how his power was at last destroy'd, and the whole world now recover'd from the Sorcery and Witchcraft of his Art, by a N-gm-n-g.

Read therefore and Wonder.

* See an explanation of hard terms, &c. at the end.

DEDICATION

To Dr. B. T.

OUR addicting yourself to the abstrusest Studies and Nocturnal Lucubrations (to the most apparent prejudice of your health, notwithstanding my repeated admonitions to the contrary) has caus'd me to dedicate this piece to you, for I think it my Duty still to advise you, and tho' I cannot prevail with you to spare your self the pains you take to your ruine, yet I hope, at least, by these Sheets, to put you in a better method than you are at present, by rendring your estate a little more easy. So leaving them to your perusal,

I remain

Your Humble

and most devoted Servant,

W. Lynn.

* Controversy between DOJ and FBI, concerning the con-

cessarily then have Snuffers too, or they would see but very dimly.

This, I must confess, has appear'd at first sight, a pretty strong argument on that side of the question, and had almost determin'd the point, yet did not absolutely convince me, because viewing and perusing often a fragment (or rather an intire Ode of an Anonymous Greek author, which seems to be writ in the stile and manner of *Anacreon*, and was certainly his or some one of his boon companions) it has at length given me quite another turn of thought upon the matter. My Reader shall have the whole Poem; but 'tis the translation only, because I would avoid all criticising * in *Greek*, which I remember was once very troublesome, especially from those who can't read a word in that language, and yet always seem'd to be as busy as the rest. 'Tis as follows:

Could a man be secure,
That life wou'd endure,
As of old, a thousand good year;
What arts might he know,
What acts might he do,
And all without trouble and care?

But

* Controversy between Boyl and Bently, concerning the genuineness of Philaris's Epistles.

But we that have but span-long lives,
 The thicker must lay on our pleasure :
 And since time will not stay,
 Add the night to the day,
 And so we may lengthen the measure.

Here the Author or Poet, tho' he supposes the antients before the Flood, to have arriv'd to a great height in Learning, Arts, and Sciences, yet at the same time he does as good as tell us that they always did their work by day-light, and consequently had no use of either Lamps, Candles, or Snuffers ; which is enough to my purpose ; which was to take down something from the overpresumed antiquity of this Engin, and from the too great pride of the Antiquarians, who from the force of a precedent argument of theirs, would certainly have perswaded us, that this was the very first Engine that ever was invented in the world (and without which no other could have been invented) had they not been confuted by me.

They have little more to say as to those very early Ages, so that we must now take a large step quite across the Flood, and some hundreds of years farther, if we would come at any thing certain upon this subject, viz. either to the time of the Jewish Taber-

nacle, or as far as the building and finishing of *Solomon's Temple* some ages after. And then among the numerous utensils and vessels employ'd in those two, we find (if we read the *Hebrew* text) the word translated Snuffers. This has convinc'd me of a real antiquity of this engine, but yet not of so great as our adversaries would boast. And since we are not *Jews* but *Christians* of this nation, we may, I think, venture to abolish this useless instrument of theirs; more especially, because we find it very detrimental to the publick-good and welfare, *which always was, and always shall be sought out and pursu'd by me.*

But to do our adversaries (who I hope will be the *Jews* only before I have done, tho' now they are both *Jews* and *Christians*) all manner of right! I shall lay down fairly and candidly the use of this engine, as practis'd among christians chiefly, what particular employment the *Jews* only may have for it, disregarding at present.

This engine then has for some ages been thought, and I doubt still is (in this island of *Great-Britain* more than perhaps in any other) so necessary, that there is scarce an house but has one, two, three, four, nay half a dozen pair of them in nightly and constant use throughout the winter. *I am not going to*
take

take them all away, and to freight a ship to Norway or Lapland with them! no my neighbours, you shall have no wrong done you, but all the real service from me that can be, and if you will bear me patiently you will not be so fond of this Jewish invention as you have been, but as to its present use we must see whether it be rightly apply'd and managed or not, and then you will be all satisfied that I mean you no ill, especially if I leave you all your proper goods as before.

The necessity of its present use is founded (if we go to mathematical proofs, as I find we must do) upon this niktoptical or niktaloptical experiment (which is best done in the winter, tho' it may be try'd in other seasons, with candles of an ordinary size, either of tallow, wax, &c.) (*viz.*) that in their burning, the consumption of tallow or wax and of the wike are not equal, for the former being substances that are wholly sulphurious, will totally consume or fly away by ignition, but the cotton of which the wike is generally form'd, having some terrestrious parts, tho' in small quantity, these can only be reduced to ashes or glass at farthest, but can never be subtiliz'd or render'd light enough to be carried off by the common air (at least where
there

there is no wind stirring, as in your houses, I hope.

But to what purpose is this stuff, this philosophy upon a candle's end, you'll say? patience, good people, you must have a little more of it, and then.

But I must begin the whole process again, because you have provok'd me; and to teach you that a philosopher (as I am) is not to be disturbed in his argument. I may condescend, however, to human frailty, and to shorten a little.

Take half a candle then that has been used before, but was put out in good order, (*viz.*) soon after it had been snuff'd, and the match left in due shape; light this with another, or a paper, you will see the flame encrease, growing bigger and larger, and will give a steady and good light for a time, but it soon alters and grows dim, afterwards more dull and cloudy by the too great length of the wick; which growing burthensome at top, falls downwards and forms itself into a globous body, but very irregular.

When this begins to appear, you may observe certain *trepidations* or *wavings* frequently in the flame, which are not horizontally, as the waves in water or quicksilver, but up and down or from the *Zenith*

nith to the *Nadir*, to speak with the learned.

These are very offensive to the eye, for they appear plainly reflected upon a book when a person is reading, as a kind of coruscations, but are in a more proper sense shadows, as proceeding from a quick succession of greater and lesser light upon the same object. This proceeds from the double attraction of the flame, (*viz.*) the first is from the new form'd matter that is above (and which is always altering its shape and encreasing or decreasing in substance) the other from below, this causes a *luctus* and a *trepidation* towards each part reciprocally as in a ballance; yet it stops by fits and renews again by fits, probably as the two attractions alter, which may be from more * reasons than I have mention'd.

*But my reader will think these too many, since they will all vanish at the snuffing of his candle, which cures the evils we have been speaking of in a moment, and what signifies our philosophysing about them? not so hasty, my good friend, the speediest cure is not always the best (tho' ours is no slow one) however, we'll give you the preference for once, and command you to snuffe
the*

* This proceeds frequently from a gentle wafting of air, as I have sometimes observed, which drives the flame to one side.

the candle! 'tis odds, but you do it badly, for if you take too little off, it will not burn bright nor last good a minute; and if you take too much you'll either put it out or make it gutter *for want of match enough to draw the heat upwards, and to binder it from acting too forcibly upon the wax or tallow below;* or if you should hit the matter to an hair and cause your candle to give the very strongest light without otherwise damaging it, you will then injure your eyes. This is strange, you'll say to hurt my eyes by too good a light? I don't say too good but too great, for 'tis certain from a weak and glimering, to a very bright and glareing light, no human eyes will bear the sudden change without damage: and tho' we don't always regard it, we must feel the pain sometimes. Cats† only of all animals are guarded against this evil naturally, and since we are not secur'd, we should seek to prevent it, as may be easily done by a *method.*

But first more of the ill effects of Snuffers. I have mention'd that if we rely upon these for regulating our lights, we shall either have too much, too little, or a vibrating and an unsteady light, the guttering down of

† See at the end.

your candle wafts it much, and the putting it quite out doubly confounds you, by depriving you of your eye-sight, and putting you in a passion probably at the same time ! how difficult therefore is the management of this silly engine, which ought to be put (contrary to what is usual even in the best regulated families) into the hands of the most honourable and prudent person of it, instead of the most servile, ignorant and mean.

But to prove this, I shall tell you a story, which, I am assured, is a true one. 'Tis of a certain Lady, who (whether constantly, or at a certain set time and place only) was very studiously inclin'd, and was observ'd by a sharper to sit with her head reclining over a book, and two candles in silver candlesticks burning by her. Her servant that attended for snuffing them, was but a few minutes withdrawn from his office, when up steps our sharper directly before the Lady, takes up one of her candles, snuffs it, and puts it out; the Lady perceives it, but not giving herself the uneasiness of raising up her bright eyes from her book, nor of uttering one word more than the monosyllable *So*. The fellow proceeds, takes up the other candle and snuffs that out. This provok'd the Lady

so as to call him careless fellow, rascal, sot, &c. he was too wise to reply, but showing his diligence in his heels, march'd off with the Lady's furniture of plate, which was never more heard of by her to this day.

'Tis amazing that such a bold action should ever be attempted, and by so weak an instrument as we have been talking of; but I am apt to believe, if the use of it be still suffer'd, the next person that makes the like attempt, may not only carry off the plate, and jewels perhaps, but the Lady herself too into the bargain. 'Tis the nature of *English* men we know, to be always projecting, and not only to be bold in invention, but to improve every thing already done, and to go beyond all patterns either in virtue or vice.

This whole matter ought therefore to be well regarded, and this engine either totally abolish'd or put into such hands as may give security to the publick, that it shall never be of detriment to any; for there has not only been thefts, rapes, murders, &c. but firing of houses and whole towns, by means of this (I won't say heathenish and idolatrous) but vile, stinking, *Jewish* invention. And now I think I have rais'd and provok'd some of your just indignations

dignations against it, so that you are ready to cry out (as you would against the greatest villain upon earth) burn him, hang him, drown him, smother him in an house of office, &c. But hold my honest neighbours, and moderate your rage a little, for this Jewish Sorcerer (that has fascinated your eye-sights, and vitiated your Optick nerves) can never be destroy'd by any of these ways.

For 'tis certain that he is so us'd constantly to the flames, that the fire can never hurt him; and as for hanging, you may gird the rope as strong as you will, but it will never choake him. Water will not touch or pass his lips, they are commonly so greasy; and besides, he generally keeps fire within them or in his throat, which will repell the element and not suffer it to enter. If you offer to smother him in a jakes, there are no stinks like his own, so that you'll fail that way.

*What's to be done? we are all aground:
Some other method must be found.*

What think you of starving him gentlemen? if you all agree to it, that will do; but methinks I see some of you that are against it; for say you, he is so useful and necessary a servant (tho' he be both a nuisance to us and dangerous) that we can't live without him.

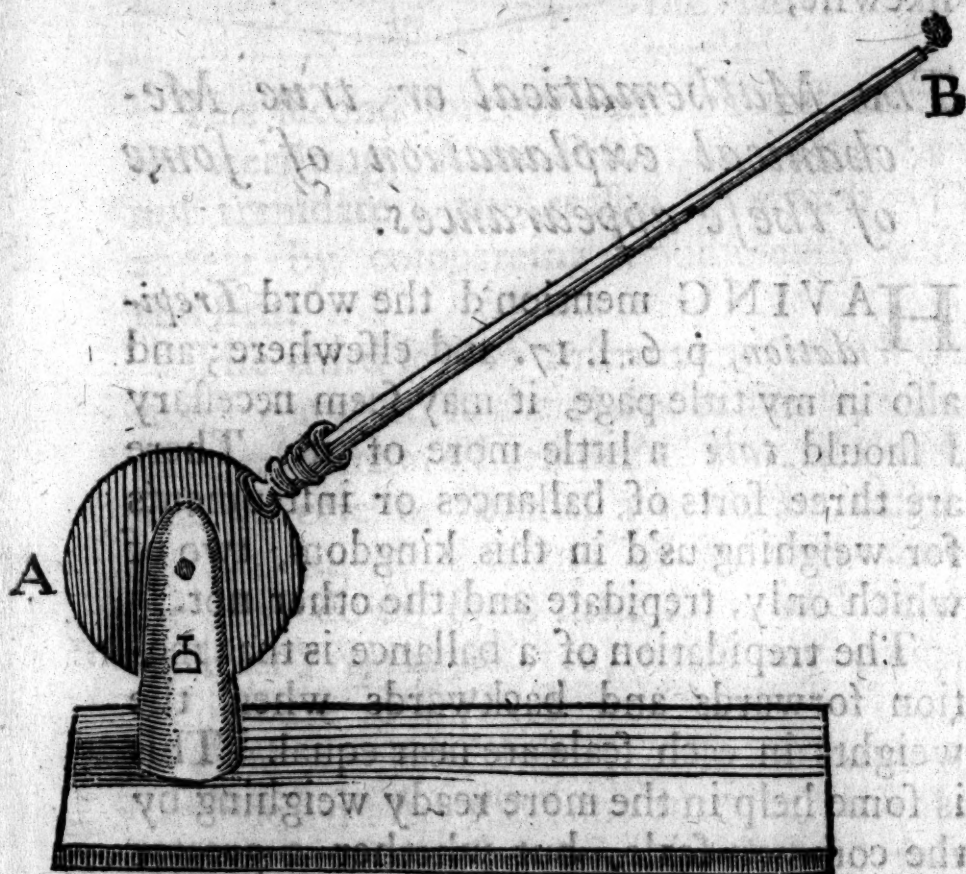
him. We can neither read, write, sew, spin, nor do any thing in a winter's evening but by his help ! I'll warrant you all as well without him and better ; you resolve therefore upon this method which shall perform the work if my magick don't fail ! but we must go very warily and cunningly, and not seem to aim at him, but undermine his chief supporters and feeders in a family.

They are a parcel of light-headed fellows with no brains, fat in their bodies, yet tall, slender, and well shap'd some of them, and have very white, pale complexions, by these marks you may know them always ; yet some of them are yellow, and these carry sweet scents about them, so that you may easily distinguish.

The way to manage them is, first take the height of their noddles (which is the same thing as their understandings) then undermine them accordingly, as my scheme directs, the consequences will follow to your wish.

The MACHINE.

An angle of 45° may be the truest elevation, but it admits of variations. See the rules at the end.



A candle plac'd thus will always give a * good, constant, and steady light, agreeing with the eye, and preserving it, for reasons

* It will be bad in the very beginning, if it has stood upright because that fouls the wick. See p. 6.

sons given in p. 8. It will never swale at † all, for reasons given, p. 8. l. 5. (*viz.*) because the match is never too short, nor can ever be too long, so needs no snuffing nor attendance. Danger of fire is perfectly prevented by this machine; nauseous scents, &c. likewise,

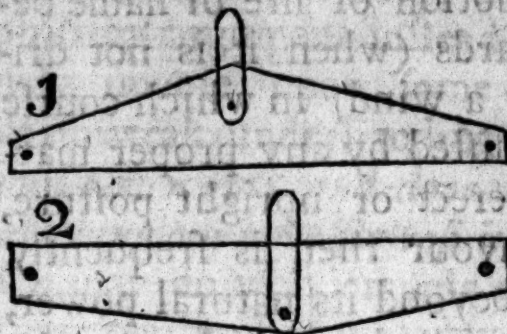
The Mathematical or true Mechanical explanation of some of these appearances.

HAVING mention'd the word *Trepidation*, p. 6. l. 17. and elsewhere; and also in my title page, it may seem necessary I should *talk* a little more of it. There are three sorts of ballances or instruments for weighing us'd in this kingdom, two of which only, *trepidate* and the other not.

The *trepidation* of a ballance is that motion forwards and backwards when the weights in each scale are near equal. This is some help in the more ready weighing by the common scale, but whether a greater exactness is gain'd thereby remains a doubt, which 'tis not my business to clear up at present; but to show (by view only) what this *trepidation* depends upon.

The

† Except at the beginning of your tryal, or if it has been snuff'd by any one, then you may expect it will. See also the rules.



The first of these will trepitate, the other not; tho' they are both of the same make, only the latter is revers'd.

The second sort of scale or instrument for weighing, is the stilliard. This does not trepitate; the reason of which will appear by comparing it judiciously with the first.

The third sort of instrument (which has no weight to it, is the Helix or screw, made of steel wire well temper'd, this, if (without its case or sheath) a moderate weight be let fall at the end of it, will move up and down for a little time, and this I call its *Trepidation*, to which my comparisons are to answer.

And we see plainly the flames move up and down after the same manner, and tho' so much quicker, yet in as regular a manner as if there was a kind of musical harmony or rithmos in them. Why this *mute performance* (which is like the musick of the spheres, that no man yet had ears good enough to hear) ceases by the method I have directed, the reason I take to be this,
(viz.)

(viz.) that the motion of fire or flame being directly upwards (when it is not driven otherwise by a wind) in which course it is very much assisted by any proper matter plac'd in an erect or upright posture, its nifus or endeavour then is frequently so great as to go beyond its natural power, and so is drove or falls back, either by the weight of the incumbent air, or drawn by that attraction I have mention'd, p. 6. l. 17. which is still in the same line, *i. e.* either upwards or downwards.

But if we place the wike sloping, the flame cannot go and return upon it, without moving out of its proper line (which I have shew'd is up and down only) and so is kept steady in its place. And having said thus much for the *Trepidation* of flame, and of the Spheres and Stars within them, vid. *Milton*, lib. 3. I bid you all good night.

POSTSCRIPT to Dr. B. T.

AND now sir, having dispatch'd the business of the publick, I must return again to yours. My first intention is to criticise a little, that is, really to find fault with the Anonymous Greek author, *I quoted so properly in the beginning*, as one that has misled many into wrong notions, in
point

point of physick only, and advanc'd a sophistical argument instead of truth, which may impose upon some people perhaps of no weak understandings, *viz. that if we join the nights and days together, without allowing any time for rest in our business, &c.* we may do wonders *and lengthen our pleasures too*, as he says; but he does not consider that those that sit up all the night, generally lye in bed all the day for it, and then where's the advantage?

But further I must tell you, *as a Physician too*, that his false and irregular method will shorten the *span of life* to an inch, as many who have gone before us in this tryal have experienc'd. I am therefore for a particular method (which will sute your case, and I must humour it I find) which is, to dispatch business at your own hours in a less time and yet do it better.

You are forced to borrow of the night divers hours frequently; these are very dear and pretious for the reasons I have just now given, yet they are best for study, because silent and undisturb'd. But there are other interruptions of study besides noise, as I have mention'd largely in this treatise, but not enough for you yet; and I can assure you, I have had an eye to your concerns for this month past, tho' I have not seen you in that time: and can suppose,

D

That

That at one hour of candle light you have been writing of a letter, which you would have in the most correct stile, and to imitate some one of the Ancients that you choose for your pattern, and the more remote author the better. Now the thing is impossible and even ridiculous, or for you to pretend to keep any to stile at all (in those hours that you choose, and before you have got my Engine and know the proper method of using it) for if your letter be of any length, your candle will want snuffing at least ten times: Besides the *obscurō's*, *claro-obscurōs*, *tremors*, &c. all which have an influence upon the *cranium* and *pericranium*, by means of the many false percussions made upon the optick nerves.

You can never therefore come up to the Ancients who wrote by day-light, and that only in the most serene and steady weather I believe.

You perceive I distinguish between the Ante-diluvian and Post-diluvian Writers; for I esteem these latter only as Neotericks, in comparison of the former.

At another hour of candle-light I imagine you to be employ'd in *Mathematicks*, and to be got upon that most abstruse and difficult point of *squaring the circle*. That you have already drawn a great number of squares

squares and curves of all kinds and dimensions, together with some right lines athwart them. Now all this is to no purpose if your candle falls into a fit of shaking once (which it will infallibly do without my method) for then all will be confus'd, so that you can never distinguish streight lines from curves, angles, squares, perfect circles, &c. if you recover it in the common way, you have seen the disadvantage.

Besides a critical time may be lost, which you can never recover your whole life after.

Which to me is the most apparent reason why this *Grand operation* has not been successfully perform'd to this day ; or if it has, 'twas before the Flood, and was quite obliterated by it, to our most irreparable loss, (except this Engine gives us a reviving hope.)

Many are the advantages of it, I do positively and experimentally assure you, but I cannot enumerate them all in this small treatise. Which that it may find acceptance with you and all the Learned world, is the utmost wish of

Your's always to serve, &c.

*RULES to be observ'd in the
use of this ENGINE.*

THE first thing to be observed is the course of the wind or air in your room ; the draught of which is generally towards the chimney, especially if there be a fire in it. You are to place the Machine so that the flame of your candle may directly oppose this draught of air, viz. A. towards the chimney, and B. from it, or towards the wind ; and according to the strength or weakness of the draught, you are to give a greater or lesser declination. In a study that is close, there is no such regard to be had, and you will have a greater steadiness than in a large room, where persons passing up and down, will cause a variation that is plainly perceptible.

Several things there are too that may spoil and give an ill opinion of the experiment, as if a strong gust of air should blow the ashes of your candle amongst the tallow, this will cause it to rope and run down filthy.

Small knots in the wike, or any small breach in it, will do the same.

A corn of tobacco the same.

These have as bad an effect without the Engine ; as likewise very bad tallow, that ropes and stinks which way soever it is used, (*viz.*) with snuffers or without.

I promis'd my readers that I would not deprive them of this piece of furniture, which is ornamental (especially when made of silver and well mounted upon its proper pedestal that is wrought handsomely of the same metal. I shall allow the use of it too with the following restrictions.

First, that no private person, when alone, employs it above six times for one candle of whatever size or make, and those all in the first quarter of an hour of its being litt ; this may do good, by hastning the burning away of the upper part for an inch or two, which is always the worst part, because too small to give a good light ; but after this it will answer well, and still grow better to the very last without any manner of trouble or ordering (the abovemention'd rules observ'd.)

Lastly, to oblige the Ladies at all *Assemblies, &c.* (or the top Quality who can well afford it) I shall allow them a *Candle-Snuffer*, provided he has read over this piece, and has not only digested the theory, but has practis'd to mend his hand by it, for a month or two at least ; without which

he

he can scarce be fit for his Office, which, I have shew'd you, is extremely difficult and important, p. 6, 7: and therefore ought to be more honour'd and set by than it is. And because I am for avoiding all rigour in introducing what may seem a *novel* (tho' wholesome) *institution*, I shall allow the four Theaters, *every one his proper Officer as at present between the acts*, till they can get something more diverting to the *spectators* as well as hearers, during that necessary *pause* of action.

Omne tulit punctum qui miscuit utile dulci.
Hor.

EXPLANATION of some difficult Terms and Words.

NIKTALOPSIA, is a Greek word, and signifies seeing in the night.

Prestigiator, is a wonder-worker or conjuror.

Cindercol, is an University word, deriv'd from *scindere collum*, to cut off your head; and spoke by a person suddenly clapping his hand behind your neck, as if he would cut it off. It alludes too to a Jugler's trick call'd the *Decollation*, representing a man beheaded

beheaded, who yet comes to life again, having his head restor'd him.

Criticks and Antiquarians, two large bodies or societies of men who are always quarrelling: they are indeed very different in their fancies, the one being very *old fashion'd*, the other commonly too *new*.

Anonymous, is nameless, or whose name is not known or us'd.

Niktoptical or Niktaloptical experiments, signifies such as can only be made in the night.

Ignition, the *Latin* and *Philosophical* word always us'd for burning.

Zenith and Nadir, are two *Arabick* words us'd in *Astronomy*, and signifie highth and depth, or top and bottom.

Coruscations, are flashes like lightning.

Luclus, is a striving or contending.

Vibrateing, is the trembling motion of the string of any musical instrument when strook, which appears double to the eye.

Fascinate, is to work a charm, chiefly By the eye and upon the eye, as snakes are said to do upon birds, &c.

Cats only of all animals, &c. p. 6. I have put this amongst the explanation of hard terms, &c. because the comparing of Christians to Cats and Owls, may be thought reflecting and giving them hard names. Thus therefore I explain the matter.

The

The eyes both of Cats and Owls are certainly very curious; the first being able to see perfectly well, both in the night and day, and the latter much better by night than by day. That faculty which both have of seeing in the night, is from the largeness of the pupil in their eye, which takes in many more rays of light than ours, so that the least glimmering will serve them. Whether they could see in a close dungeon, especially if the walls are black'd over, is doubtful, but if it be affirm'd that they do, it must be accounted for by a far greater quantity of those animal salts, which makes the artificial phosphorus, in their blood and humours, than in ours. This may cause a scintillation or sparkling in their eyes, and so cause a light in the darkest place. 'Tis supposed that Owls see full as well, and perhaps farther in the night than Cats. This last faculty being in the proper nature of birds that are ravenous especially, and very necessary for spying out and catching their prey; their eyes are perfectly fram'd for it, and capable of altering into any shape at will; yet the Owl alone is blind in the sunshine, and 'tis from too great a light, which he cannot exclude as that other *Niktaloptical* creature a Cat can do, because her eye is furnished with

membranes that draw like two curtains meeting; for we shall observe in her eye but a very little, narrow slit open in a clear sunshiny day, but in the evening 'tis large and wide, and in the night quite round and full as the Owls. All this she can perform at pleasure, which is beyond our power: For take two persons and place them in a long room that has only a window at the end; if they have sat a good while, one at the light part of the room, the other at the dark, they shall both perhaps be able to see well; but let them exchange their situations they shall each find it for the worse, the one complaining of too much light, the other of too little, till by degrees they are accustom'd, and their eyes conform by *slow degrees* (for of such only we are capable) to the proper shape.

And this is one of the most material parts of Opticks, the giving a constant and steady light always.

As for the greatness, it depends upon your choice of what is proper, or you will bestow for your use, the experiment will answer in all tryals, with due care, in following directions, &c.

Lamp, p. 3. is an hard word, for 'tis *Greek*, and signifies any thing that shines. *Bright as the Lamp of night or Orb of day.*
The Lamp of day is quenck'd beneath the deep.

Here it signifies the Sun and Moon, in *Ho-*
mer. It may signifie the Stars too, and I
 believe does in *Milton*, somewhere. In
 lesser authors it may signifie a common
street-or house-Lamp, a Candle, the natural
or artificial phosphorus, stinking fish, a gam-
mon of bacon, rotten wood, or a glow-worm.
 But to leave this and come to use. That
 accute Philosopher and Philomath, *Isaac*
Bickerstaff, has discover'd a fault in com-
 mon Lamps (which I know not how to
 cure, as I have done in my subjects; no!
 nor trimming them often will not do it,
 tho' that clears them up a little) 'tis, that
 they cloud and darken the brains of those
 that sit near them, by a kind of sympathy, or
 by certain gross, unctuous, or foetid exha-
 lations which they emit; so that the very
 inventions of those, who study or work by
 them very much, partake of their grossness,
 and may be said properly (for I use his
 own words) *to smell of the Lamp*. A per-
 son of far less discernment in Astrology
 than *Isaac* was of, may foretell, that the
 succeeding or new Age of Writers (upon all
 subjects) now to come, will be exceeding
 bright and pure, if they do but observe and
 keep up to all those rules (as to the choice
 and manner of their lights) which I have
 lay'd down and dispensed for them at once;
 and

and I have given them in so large and plain a manner on purpose, that a wilful ignorance (or total neglect of them) may be, with the *clearest* justice, unpardonable.

An Angle of 45, or the eighth part of a Circle; is just as much sloping as a pair of stairs are, when each step is of an equal height and breadth, (*viz.*) the most common sort.

Helix or *Scrue*, is the pocket stilliard, which several people carry about them for weighing; if the wire, that is coil'd up in it, was much smaller and longer or more of it, this experiment would be very perceptible.

Rithmos or *Rithmoi*, numbers, such as both Poetry and Musick depend upon *Musick of the Spheres*. See a comical notion of it in *Hudibras*.

Nisus or *Endeavour*, are words of the same signification, only one is a learned word, the other vulgar.

Sophistical, is deceitful and false, yet subtilly contriv'd or argu'd.

Claro obscuro, a term us'd in painting or shadowing, or a particular manner of casting the shades into light and darkness.

Antediluvian and *Postdiluvian*, before and after the Flood.

Neotericks, new Things or Authors.

Obliterated, destroy'd or done out as we would do letters or characters made in sand (which was the most antient way of Mathematicians casting their figures or schemes) which a flood would obliterate.

Antediluvian Letters or Writings, the Author of the Spectator has given us a specimen of some

Antediluvian Amours or Love-Letters (pretty much differing from those of *Ovid*) in which the style is both singular and exact, or regular throughout

... *Diverting to the Spectators, &c.* Sir Richard Steel, *Corrector of the Playhouse*, speaks of some persons that were great admirers of this piece of *Leger-de-main*! When, or whether ever it shou'd be left out, I leave it wholly to him, tho' I have given a caution, as to its *wholesomeness*, which depends much upon the Operators care or performance.

Omne tulit punctum, &c. my tail-piece of *Latin* (which perhaps might have been as well set in the front or head of my book, had I not litt of a Motto in *English* that was far more puzzling than any *Latin* one) signifies no more than that *pleasure and profit includes all we can desire from an Author*, tho' to this we shou'd add variety too (as I have done) from the same adviser, *viz. Horace*, in another place.

This is the proper excuse for my manner of writing, which has the very best Authority to recommend it, tho' never us'd upon such a kind of subject before, *viz. a piece of strict Opticks and Mathematics*, perfectly new and untouch'd before, yet really useful to all, so was necessary to be wrote of, and in this manner explain'd, that it might both inform, and be agreeable to the very meanest capacities, as well as be approv'd by persons of the greatest.

F - T - N - I - S

